



SEQUENCE LISTING

<110> Gen Biosciences, Inc.

Grenier, Jennifer
Marshall, David
Prudent, James
Richmond, Craig
Roesch, Eric
Scherrer, Christopher
Sherrill, Christopher
Ptacin, Jerod

<120> Solid Support Assay Systems and Methods Utilizing Non-Natural Bases

<130> PAT015-US5

<140> 09/977,615

<141> 2001-10-15

<150> 60/240,397

<151> 2000-10-14

<150> 60/282,831

<151> 2001-04-10

<150> 09/861,292

<151> 2001-05-18

<150> 60/293,259

<151> 2001-05-22

<160> 156

<170> PatentIn version 3.2

<210> 1

<211> 10

<212> DNA

<213> Artificial

<220>

<223> synthetic oligonucleotide

<220>

<221> modified_base

<222> (3)..(3)

<223> n represents iso-cytosine

<220>

<221> misc_feature

<222> (3)..(3)

<223> n is a, c, g, or t

<220>

<221> modified_base

<222> (6)..(6)

<223> n represents iso-cytosine

<220>

<221> misc_feature

<222> (6)..(6)

<223> n is a, c, g, or t

<400> 1

gangtntgtc

10

<210> 2

<211> 10

<212> DNA

<213> Artificial

<220>

<223> synthetic oligonucleotide

<220>

<221> modified_base

<222> (2)..(2)

<223> n represents iso-cytosine

<220>

<221> misc_feature

<222> (2)..(2)

<223> n is a, c, g, or t

<220>

<221> modified_base

<222> (6)..(6)

<223> n represents iso-cytosine

<220>

<221> misc_feature

<222> (6)..(6)

<223> n is a, c, g, or t

<400> 2

cngttnttcc

10

<210> 3

<211> 10

<212> DNA

<213> Artificial

<220>

<223> synthetic oligonucleotide

<220>

<221> modified_base

<222> (3)..(3)

<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (3)..(3)
<223> n is a, c, g, or t

<220>
<221> modified_base
<222> (7)..(7)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (7)..(7)
<223> n is a, c, g, or t

<400> 3
ggnttgntag

10

<210> 4
<211> 10
<212> DNA
<213> Artificial

<220>
<223> synthetic oligonucleotide

<220>
<221> modified_base
<222> (4)..(4)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (4)..(4)
<223> n is a, c, g, or t

<220>
<221> modified_base
<222> (6)..(6)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (6)..(6)
<223> n is a, c, g, or t

<400> 4
cttngntctc

10

<210> 5
<211> 10
<212> DNA
<213> Artificial

<220>

<223> synthetic oligonucleotide

<220>

<221> modified_base

<222> (2)..(2)

<223> n represents iso-cytosine

<220>

<221> misc_feature

<222> (2)..(2)

<223> n is a, c, g, or t

<220>

<221> modified_base

<222> (6)..(6)

<223> n represents iso-cytosine

<220>

<221> misc_feature

<222> (6)..(6)

<223> n is a, c, g, or t

<400> 5

cntcangaac

10

<210> 6

<211> 10

<212> DNA

<213> Artificial

<220>

<223> synthetic oligonucleotide

<220>

<221> modified_base

<222> (5)..(5)

<223> n represents iso-cytosine

<220>

<221> misc_feature

<222> (5)..(5)

<223> n is a, c, g, or t

<220>

<221> modified_base

<222> (8)..(8)

<223> n represents iso-cytosine

<220>

<221> misc_feature

<222> (8)..(8)

<223> n is a, c, g, or t

<400> 6

gtagntangc

10

<210> 7
<211> 10
<212> DNA
<213> Artificial

<220>
<223> synthetic oligonucleotide

<220>
<221> modified_base
<222> (4)..(4)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (4)..(4)
<223> n is a, c, g, or t

<220>
<221> modified_base
<222> (6)..(6)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (6)..(6)
<223> n is a, c, g, or t

<400> 7
ggangntaac

10

<210> 8
<211> 10
<212> DNA
<213> Artificial

<220>
<223> synthetic oligonucleotide

<220>
<221> modified_base
<222> (2)..(2)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (2)..(2)
<223> n is a, c, g, or t

<220>
<221> modified_base
<222> (7)..(7)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (7)..(7)
<223> n is a, c, g, or t

<400> 8
cngtatngtg

10

<210> 9
<211> 10
<212> DNA
<213> Artificial

<220>
<223> synthetic oligonucleotide

<220>
<221> modified_base
<222> (4)..(4)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (4)..(4)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (9)..(9)
<223> n is a, c, g, or t

<220>
<221> modified_base
<222> (10)..(10)
<223> n represents iso-cytosine

<400> 9
catnggtang

10

<210> 10
<211> 10
<212> DNA
<213> Artificial

<220>
<223> synthetic oligonucleotide

<220>
<221> modified_base
<222> (5)..(5)
<223> n represents iso-cytosine

<220>

<221> misc_feature
<222> (5)..(5)
<223> n is a, c, g, or t

<220>
<221> modified_base
<222> (9)..(9)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (9)..(9)
<223> n is a, c, g, or t

<400> 10
gattntcgnc

10

<210> 11
<211> 10
<212> DNA
<213> Artificial

<220>
<223> synthetic oligonucleotide

<220>
<221> modified_base
<222> (4)..(4)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (4)..(4)
<223> n is a, c, g, or t

<220>
<221> modified_base
<222> (6)..(6)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (6)..(6)
<223> n is a, c, g, or t

<400> 11
gttnangacc

10

<210> 12
<211> 10
<212> DNA
<213> Artificial

<220>
<223> synthetic oligonucleotide

<220>
<221> modified_base
<222> (2)..(2)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (2)..(2)
<223> n is a, c, g, or t

<220>
<221> modified_base
<222> (6)..(6)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (6)..(6)
<223> n is a, c, g, or t

<400> 12
cngaangatc

10

<210> 13
<211> 10
<212> DNA
<213> Artificial

<220>
<223> synthetic oligonucleotide

<220>
<221> modified_base
<222> (4)..(4)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (4)..(4)
<223> n is a, c, g, or t

<220>
<221> modified_base
<222> (9)..(9)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (9)..(9)
<223> n is a, c, g, or t

<400> 13
caantacgnc

10

<210> 14
<211> 10
<212> DNA
<213> Artificial

<220>
<223> synthetic oligonucleotide

<220>
<221> modified_base
<222> (4)..(4)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (4)..(4)
<223> n is a, c, g, or t

<220>
<221> modified_base
<222> (8)..(8)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (8)..(8)
<223> n is a, c, g, or t

<400> 14
cggnatanac

10

<210> 15
<211> 10
<212> DNA
<213> Artificial

<220>
<223> synthetic oligonucleotide

<220>
<221> modified_base
<222> (2)..(2)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (2)..(2)
<223> n is a, c, g, or t

<220>
<221> modified_base
<222> (6)..(6)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (6)..(7)
<223> n is a, c, g, or t

<220>
<221> modified_base
<222> (7)..(7)
<223> n represents iso-cytosine

<400> 15
gnaaannagg

10

<210> 16
<211> 10
<212> DNA
<213> Artificial

<220>
<223> synthetic oligonucleotide

<220>
<221> modified_base
<222> (4)..(4)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (4)..(4)
<223> n is a, c, g, or t

<220>
<221> modified_base
<222> (8)..(8)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (8)..(9)
<223> n is a, c, g, or t

<220>
<221> modified_base
<222> (9)..(9)
<223> n represents iso-cytosine

<400> 16
gtcntagnnc

10

<210> 17
<211> 10
<212> DNA
<213> Artificial

<220>

<223> synthetic oligonucleotide

<220>

<221> modified_base

<222> (2)..(2)

<223> n represents iso-cytosine

<220>

<221> misc_feature

<222> (2)..(2)

<223> n is a, c, g, or t

<220>

<221> modified_base

<222> (6)..(6)

<223> n represents iso-cytosine

<220>

<221> misc_feature

<222> (6)..(6)

<223> n is a, c, g, or t

<220>

<221> modified_base

<222> (9)..(9)

<223> n represents iso-cytosine

<220>

<221> misc_feature

<222> (9)..(9)

<223> n is a, c, g, or t

<400> 17

gncctntanc

10

<210> 18

<211> 10

<212> DNA

<213> Artificial

<220>

<223> synthetic oligonucleotide

<220>

<221> modified_base

<222> (3)..(3)

<223> n represents iso-cytosine

<220>

<221> misc_feature

<222> (3)..(3)

<223> n is a, c, g, or t

<220>

<221> modified_base

<222> (6)..(6)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (6)..(6)
<223> n is a, c, g, or t

<400> 18
ccnacntgag

10

<210> 19
<211> 10
<212> DNA
<213> Artificial

<220>
<223> synthetic oligonucleotide

<220>
<221> modified_base
<222> (3)..(3)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (3)..(4)
<223> n is a, c, g, or t

<220>
<221> modified_base
<222> (4)..(4)
<223> n represents iso-cytosine

<220>
<221> modified_base
<222> (7)..(7)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (7)..(7)
<223> n is a, c, g, or t

<400> 19
ctnnncanagg

10

<210> 20
<211> 10
<212> DNA
<213> Artificial

<220>
<223> synthetic oligonucleotide

<220>
<221> modified_base
<222> (3)..(3)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (3)..(3)
<223> n is a, c, g, or t

<220>
<221> modified_base
<222> (6)..(6)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (6)..(6)
<223> n is a, c, g, or t

<400> 20
gtnganatgc

10

<210> 21
<211> 10
<212> DNA
<213> Artificial

<220>
<223> synthetic oligonucleotide

<220>
<221> modified_base
<222> (5)..(5)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (5)..(5)
<223> n is a, c, g, or t

<220>
<221> modified_base
<222> (8)..(8)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (8)..(9)
<223> n is a, c, g, or t

<220>
<221> modified_base
<222> (9)..(9)
<223> n represents iso-cytosine

<400> 21
gaaantgnng

10

<210> 22
<211> 10
<212> DNA
<213> Artificial

<220>
<223> synthetic oligonucleotide

<220>
<221> modified_base
<222> (5)..(5)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (5)..(5)
<223> n is a, c, g, or t

<220>
<221> modified_base
<222> (7)..(7)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (7)..(7)
<223> n is a, c, g, or t

<400> 22
gctgnanatc

10

<210> 23
<211> 10
<212> DNA
<213> Artificial

<220>
<223> synthetic oligonucleotide

<220>
<221> modified_base
<222> (5)..(5)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (5)..(5)
<223> n is a, c, g, or t

<220>

<221> modified_base
<222> (8)..(8)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (8)..(8)
<223> n is a, c, g, or t

<400> 23
cgcanatnac

10

<210> 24
<211> 10
<212> DNA
<213> Artificial

<220>
<223> synthetic oligonucleotide

<220>
<221> modified_base
<222> (5)..(5)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (5)..(5)
<223> n is a, c, g, or t

<220>
<221> modified_base
<222> (8)..(8)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (8)..(8)
<223> n is a, c, g, or t

<400> 24
ctggntcnag

10

<210> 25
<211> 10
<212> DNA
<213> Artificial

<220>
<223> synthetic oligonucleotide

<220>
<221> modified_base
<222> (5)..(5)

<223> n represents iso-cytosine

<220>

<221> misc_feature

<222> (5)..(5)

<223> n is a, c, g, or t

<220>

<221> modified_base

<222> (7)..(7)

<223> n represents iso-cytosine

<220>

<221> misc_feature

<222> (7)..(8)

<223> n is a, c, g, or t

<220>

<221> modified_base

<222> (8)..(8)

<223> n represents iso-cytosine

<400> 25

ggaananncc

10

<210> 26

<211> 10

<212> DNA

<213> Artificial

<220>

<223> synthetic oligonucleotide

<220>

<221> modified_base

<222> (2)..(2)

<223> n represents iso-cytosine

<220>

<221> misc_feature

<222> (2)..(2)

<223> n is a, c, g, or t

<220>

<221> modified_base

<222> (7)..(7)

<223> n represents iso-cytosine

<220>

<221> misc_feature

<222> (7)..(7)

<223> n is a, c, g, or t

<400> 26

cntcgcntac

10

<210> 27
<211> 10
<212> DNA
<213> Artificial

<220>
<223> synthetic oligonucleotide

<220>
<221> modified_base
<222> (2)..(2)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (2)..(2)
<223> n is a, c, g, or t

<220>
<221> modified_base
<222> (4)..(4)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (4)..(4)
<223> n is a, c, g, or t

<220>
<221> modified_base
<222> (9)..(9)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (9)..(9)
<223> n is a, c, g, or t

<400> 27
gncnaaaang

10

<210> 28
<211> 10
<212> DNA
<213> Artificial

<220>
<223> synthetic oligonucleotide

<220>
<221> modified_base
<222> (2)..(2)
<223> n represents iso-cytosine

```

<220>
<221> misc_feature
<222> (2)..(3)
<223> n is a, c, g, or t

<220>
<221> modified_base
<222> (3)..(3)
<223> n represents iso-cytosine

<220>
<221> modified_base
<222> (7)..(7)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (7)..(7)
<223> n is a, c, g, or t

```

```

<400> 28
cnngacnadc

```

10

```

<210> 29
<211> 10
<212> DNA
<213> Artificial

```

```

<220>
<223> synthetic oligonucleotide

```

```

<220>
<221> modified_base
<222> (5)..(5)
<223> n represents iso-cytosine

```

```

<220>
<221> misc_feature
<222> (5)..(5)
<223> n is a, c, g, or t

```

```

<220>
<221> modified_base
<222> (8)..(8)
<223> n represents iso-cytosine

```

```

<220>
<221> misc_feature
<222> (8)..(8)
<223> n is a, c, g, or t

```

```

<400> 29
ccatnagncc

```

10

```

<210> 30

```

<211> 10
<212> DNA
<213> Artificial

<220>
<223> synthetic oligonucleotide

<220>
<221> modified_base
<222> (5)..(5)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (5)..(5)
<223> n is a, c, g, or t

<220>
<221> modified_base
<222> (7)..(7)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (7)..(7)
<223> n is a, c, g, or t

<400> 30
ggcantnttgg

10

<210> 31
<211> 10
<212> DNA
<213> Artificial

<220>
<223> synthetic oligonucleotide

<220>
<221> modified_base
<222> (3)..(3)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (3)..(3)
<223> n is a, c, g, or t

<220>
<221> modified_base
<222> (7)..(7)
<223> n represents iso-cytosine

<220>
<221> misc_feature

<222> (7)..(7)
<223> n is a, c, g, or t

<400> 31
ctnaacnggg

10

<210> 32
<211> 9
<212> DNA
<213> Artificial

<220>
<223> synthetic oligonucleotide

<220>
<221> modified_base
<222> (4)..(4)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (4)..(4)
<223> n is a, c, g, or t

<220>
<221> modified_base
<222> (8)..(8)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (8)..(8)
<223> n is a, c, g, or t

<400> 32
gganacgng

9

<210> 33
<211> 10
<212> DNA
<213> Artificial

<220>
<223> synthetic oligonucleotide

<220>
<221> modified_base
<222> (4)..(4)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (4)..(4)
<223> n is a, c, g, or t

<220>
<221> modified_base
<222> (9)..(9)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (9)..(9)
<223> n is a, c, g, or t

<400> 33
gcgntttang

10

<210> 34
<211> 10
<212> DNA
<213> Artificial

<220>
<223> synthetic oligonucleotide

<220>
<221> modified_base
<222> (4)..(4)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (4)..(4)
<223> n is a, c, g, or t

<220>
<221> modified_base
<222> (7)..(7)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (7)..(7)
<223> n is a, c, g, or t

<220>
<221> modified_base
<222> (9)..(9)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (9)..(9)
<223> n is a, c, g, or t

<400> 34
gagnagntnc

10

<210> 35
<211> 10
<212> DNA
<213> Artificial

<220>
<223> synthetic oligonucleotide

<220>
<221> modified_base
<222> (2)..(2)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (2)..(2)
<223> n is a, c, g, or t

<220>
<221> modified_base
<222> (7)..(7)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (7)..(7)
<223> n is a, c, g, or t

<400> 35
gnctaancg

10

<210> 36
<211> 10
<212> DNA
<213> Artificial

<220>
<223> synthetic oligonucleotide

<220>
<221> modified_base
<222> (3)..(3)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (3)..(3)
<223> n is a, c, g, or t

<220>
<221> modified_base
<222> (7)..(7)
<223> n represents iso-cytosine

<220>

<221> misc_feature
<222> (7)..(7)
<223> n is a, c, g, or t

<400> 36
gcntgtncac

10

<210> 37
<211> 10
<212> DNA
<213> Artificial

<220>
<223> synthetic oligonucleotide

<220>
<221> modified_base
<222> (2)..(2)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (2)..(2)
<223> n is a, c, g, or t

<220>
<221> modified_base
<222> (7)..(7)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (7)..(7)
<223> n is a, c, g, or t

<400> 37
gncagantcg

10

<210> 38
<211> 10
<212> DNA
<213> Artificial

<220>
<223> synthetic oligonucleotide

<220>
<221> modified_base
<222> (4)..(4)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (4)..(4)

<223> n is a, c, g, or t
<220>
<221> modified_base
<222> (9)..(9)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (9)..(9)
<223> n is a, c, g, or t

<400> 38
cgtnctagnng

10

<210> 39
<211> 10
<212> DNA
<213> Artificial

<220>
<223> synthetic oligonucleotide

<220>
<221> modified_base
<222> (3)..(3)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (3)..(4)
<223> n is a, c, g, or t

<220>
<221> modified_base
<222> (4)..(4)
<223> n represents iso-cytosine

<220>
<221> modified_base
<222> (9)..(9)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (9)..(9)
<223> n is a, c, g, or t

<400> 39
cgnntagtnng

10

<210> 40
<211> 10
<212> DNA
<213> Artificial

<220>
<223> synthetic oligonucleotide

<220>
<221> modified_base
<222> (2)..(2)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (2)..(2)
<223> n is a, c, g, or t

<220>
<221> modified_base
<222> (6)..(6)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (6)..(6)
<223> n is a, c, g, or t

<400> 40
cnaggnaacc

10

<210> 41
<211> 10
<212> DNA
<213> Artificial

<220>
<223> synthetic oligonucleotide

<220>
<221> modified_base
<222> (2)..(2)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (2)..(2)
<223> n is a, c, g, or t

<220>
<221> modified_base
<222> (6)..(6)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (6)..(6)
<223> n is a, c, g, or t

<220>
<221> modified_base
<222> (9)..(9)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (9)..(9)
<223> n is a, c, g, or t

<400> 41
cnagangang

10

<210> 42
<211> 9
<212> DNA
<213> Artificial

<220>
<223> synthetic oligonucleotide

<220>
<221> modified_base
<222> (3)..(3)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (3)..(3)
<223> n is a, c, g, or t

<220>
<221> modified_base
<222> (6)..(6)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (6)..(6)
<223> n is a, c, g, or t

<400> 42
cgntgngtc

9

<210> 43
<211> 10
<212> DNA
<213> Artificial

<220>
<223> synthetic oligonucleotide

<220>
<221> modified_base

<222> (4)..(4)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (4)..(4)
<223> n is a, c, g, or t

<220>
<221> modified_base
<222> (8)..(8)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (8)..(8)
<223> n is a, c, g, or t

<400> 43
cagncgtnag

10

<210> 44
<211> 10
<212> DNA
<213> Artificial

<220>
<223> synthetic oligonucleotide

<220>
<221> modified_base
<222> (5)..(5)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (5)..(5)
<223> n is a, c, g, or t

<220>
<221> modified_base
<222> (8)..(8)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (8)..(8)
<223> n is a, c, g, or t

<400> 44
ggctntgnac

10

<210> 45
<211> 10
<212> DNA

<213> Artificial

<220>
<223> synthetic oligonucleotide

<220>
<221> modified_base
<222> (5)..(5)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (5)..(5)
<223> n is a, c, g, or t

<220>
<221> modified_base
<222> (7)..(7)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (7)..(7)
<223> n is a, c, g, or t

<400> 45
ccagnngaag

10

<210> 46
<211> 10
<212> DNA
<213> Artificial

<220>
<223> synthetic oligonucleotide

<220>
<221> modified_base
<222> (4)..(4)
<223> n represent iso-cytosine

<220>
<221> misc_feature
<222> (4)..(4)
<223> n is a, c, g, or t

<220>
<221> modified_base
<222> (8)..(8)
<223> n represent iso-cytosine

<220>
<221> misc_feature
<222> (8)..(8)
<223> n is a, c, g, or t

<400> 46
ggcnaatngc

10

<210> 47
<211> 9
<212> DNA
<213> Artificial

<220>
<223> synthetic oligonucleotide

<220>
<221> modified_base
<222> (2)..(2)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (2)..(2)
<223> n is a, c, g, or t

<220>
<221> modified_base
<222> (7)..(7)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (7)..(7)
<223> n is a, c, g, or t

<400> 47
gnctgcngg

9

<210> 48
<211> 10
<212> DNA
<213> Artificial

<220>
<223> synthetic oligonucleotide

<220>
<221> modified_base
<222> (3)..(3)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (3)..(3)
<223> n is a, c, g, or t

<220>

<221> modified_base
<222> (6)..(6)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (6)..(6)
<223> n is a, c, g, or t

<400> 48
ganctnccggc

10

<210> 49
<211> 10
<212> DNA
<213> Artificial

<220>
<223> synthetic oligonucleotide

<220>
<221> modified_base
<222> (3)..(3)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (3)..(3)
<223> n is a, c, g, or t

<220>
<221> modified_base
<222> (7)..(7)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (7)..(7)
<223> n is a, c, g, or t

<400> 49
gtncganggg

10

<210> 50
<211> 10
<212> DNA
<213> Artificial

<220>
<223> synthetic oligonucleotide

<220>
<221> modified_base
<222> (3)..(3)

<223> n represents iso-cytosine

<220>

<221> misc_feature

<222> (3)..(4)

<223> n is a, c, g, or t

<220>

<221> modified_base

<222> (4)..(4)

<223> n represents iso-cytosine

<220>

<221> modified_base

<222> (9)..(9)

<223> n represents iso-cytosine

<220>

<221> misc_feature

<222> (9)..(9)

<223> n is a, c, g, or t

<400> 50

ggnnatccng

10

<210> 51

<211> 10

<212> DNA

<213> Artificial

<220>

<223> synthetic oligonucleotide

<220>

<221> modified_base

<222> (2)..(2)

<223> n represents iso-cytosine

<220>

<221> misc_feature

<222> (2)..(2)

<223> n is a, c, g, or t

<220>

<221> modified_base

<222> (7)..(7)

<223> n represents iso-cytosine

<220>

<221> misc_feature

<222> (7)..(7)

<223> n is a, c, g, or t

<400> 51

gncttcnatg

10

<210> 52
<211> 10
<212> DNA
<213> Artificial

<220>
<223> synthetic oligonucleotide

<220>
<221> modified_base
<222> (2)..(2)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (2)..(2)
<223> n is a, c, g, or t

<220>
<221> modified_base
<222> (7)..(7)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (7)..(8)
<223> n is a, c, g, or t

<220>
<221> modified_base
<222> (8)..(8)
<223> n represents iso-cytosine

<400> 52
cntcttnncc

10

<210> 53
<211> 10
<212> DNA
<213> Artificial

<220>
<223> synthetic oligonucleotide

<220>
<221> modified_base
<222> (5)..(5)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (5)..(5)
<223> n is a, c, g, or t

<220>
<221> modified_base
<222> (7)..(7)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (7)..(7)
<223> n is a, c, g, or t

<400> 53
ctctnanccc

10

<210> 54
<211> 10
<212> DNA
<213> Artificial

<220>
<223> synthetic oligonucleotide

<220>
<221> modified_base
<222> (4)..(4)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (4)..(4)
<223> n is a, c, g, or t

<220>
<221> modified_base
<222> (9)..(9)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (9)..(9)
<223> n is a, c, g, or t

<400> 54
ctcntggtnc

10

<210> 55
<211> 10
<212> DNA
<213> Artificial

<220>
<223> synthetic oligonucleotide

<220>
<221> modified_base

<222> (2)..(2)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (2)..(2)
<223> n is a, c, g, or t

<220>
<221> modified_base
<222> (7)..(7)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (7)..(7)
<223> n is a, c, g, or t

<400> 55
gncaaancac

10

<210> 56
<211> 10
<212> DNA
<213> Artificial

<220>
<223> synthetic oligonucleotide

<220>
<221> modified_base
<222> (4)..(4)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (4)..(4)
<223> n is a, c, g, or t

<220>
<221> modified_base
<222> (7)..(7)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (7)..(7)
<223> n is a, c, g, or t

<400> 56
gttngcnttg

10

<210> 57
<211> 10
<212> DNA

<213> Artificial

<220>
<223> synthetic oligonucleotide

<220>
<221> modified_base
<222> (2)..(2)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (2)..(2)
<223> n is a, c, g, or t

<220>
<221> modified_base
<222> (4)..(4)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (4)..(4)
<223> n is a, c, g, or t

<220>
<221> modified_base
<222> (6)..(6)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (6)..(6)
<223> n is a, c, g, or t

<400> 57
cncntncaac

10

<210> 58
<211> 10
<212> DNA
<213> Artificial

<220>
<223> synthetic oligonucleotide

<220>
<221> modified_base
<222> (3)..(3)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (3)..(4)
<223> n is a, c, g, or t

<220>
<221> modified_base
<222> (4)..(4)
<223> n represents iso-cytosine

<220>
<221> modified_base
<222> (8)..(8)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (8)..(9)
<223> n is a, c, g, or t

<220>
<221> modified_base
<222> (9)..(9)
<223> n represents iso-cytosine

<400> 58
ctnnacannc

10

<210> 59
<211> 10
<212> DNA
<213> Artificial

<220>
<223> synthetic oligonucleotide

<220>
<221> modified_base
<222> (2)..(2)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (2)..(2)
<223> n is a, c, g, or t

<220>
<221> modified_base
<222> (7)..(7)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (7)..(7)
<223> n is a, c, g, or t

<400> 59
cnactcnacc

10

<210> 60
<211> 10
<212> DNA
<213> Artificial

<220>
<223> synthetic oligonucleotide

<220>
<221> modified_base
<222> (4)..(4)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (4)..(4)
<223> n is a, c, g, or t

<220>
<221> modified_base
<222> (7)..(7)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (7)..(8)
<223> n is a, c, g, or t

<220>
<221> modified_base
<222> (8)..(8)
<223> n represents iso-cytosine

<400> 60
gacncanntg

10

<210> 61
<211> 10
<212> DNA
<213> Artificial

<220>
<223> synthetic oligonucleotide

<220>
<221> modified_base
<222> (4)..(4)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (4)..(4)
<223> n is a, c, g, or t

<220>

<221> modified_base
<222> (7)..(7)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (7)..(7)
<223> n is a, c, g, or t

<400> 61
ctcnctnacg

10

<210> 62
<211> 10
<212> DNA
<213> Artificial

<220>
<223> synthetic oligonucleotide

<220>
<221> modified_base
<222> (5)..(5)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (5)..(5)
<223> n is a, c, g, or t

<220>
<221> modified_base
<222> (8)..(8)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (8)..(8)
<223> n is a, c, g, or t

<400> 62
gtggnctntc

10

<210> 63
<211> 10
<212> DNA
<213> Artificial

<220>
<223> synthetic oligonucleotide

<220>
<221> modified_base
<222> (3)..(3)

<223> n represents iso-cytosine

<220>

<221> misc_feature

<222> (3)..(4)

<223> n is a, c, g, or t

<220>

<221> modified_base

<222> (4)..(4)

<223> n represents iso-cytosine

<220>

<221> modified_base

<222> (8)..(8)

<223> n represents iso-cytosine

<220>

<221> misc_feature

<222> (8)..(8)

<223> n is a, c, g, or t

<400> 63

cannaccnag

10

<210> 64

<211> 10

<212> DNA

<213> Artificial

<220>

<223> synthetic oligonucleotide

<220>

<221> modified_base

<222> (3)..(3)

<223> n represents iso-cytosine

<220>

<221> misc_feature

<222> (3)..(3)

<223> n is a, c, g, or t

<220>

<221> modified_base

<222> (5)..(5)

<223> n represents iso-cytosine

<220>

<221> misc_feature

<222> (5)..(5)

<223> n is a, c, g, or t

<220>

<221> modified_base

<222> (7)..(7)

<223> n represents iso-cytosine

<220>

<221> misc_feature

<222> (7)..(7)

<223> n is a, c, g, or t

<400> 64

gtncnanacc

10

<210> 65

<211> 10

<212> DNA

<213> Artificial

<220>

<223> synthetic oligonucleotide

<220>

<221> modified_base

<222> (4)..(4)

<223> n represents iso-cytosine

<220>

<221> misc_feature

<222> (4)..(5)

<223> n is a, c, g, or t

<220>

<221> modified_base

<222> (5)..(5)

<223> n represents iso-cytosine

<220>

<221> modified_base

<222> (8)..(8)

<223> n represents iso-cytosine

<220>

<221> misc_feature

<222> (8)..(8)

<223> n is a, c, g, or t

<400> 65

cacnntgntc

10

<210> 66

<211> 10

<212> DNA

<213> Artificial

<220>

<223> synthetic oligonucleotide

<220>
<221> modified_base
<222> (2)..(2)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (2)..(2)
<223> n is a, c, g, or t

<220>
<221> modified_base
<222> (7)..(7)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (7)..(7)
<223> n is a, c, g, or t

<400> 66
gntcctngtc

10

<210> 67
<211> 10
<212> DNA
<213> Artificial

<220>
<223> synthetic oligonucleotide

<220>
<221> modified_base
<222> (3)..(3)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (3)..(4)
<223> n is a, c, g, or t

<220>
<221> modified_base
<222> (4)..(4)
<223> n represents iso-cytosine

<220>
<221> modified_base
<222> (9)..(9)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (9)..(9)
<223> n is a, c, g, or t

<400> 67
ccnnatgtng

10

<210> 68
<211> 10
<212> DNA
<213> Artificial

<220>
<223> synthetic oligonucleotide

<220>
<221> modified_base
<222> (2)..(2)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (2)..(2)
<223> n is a, c, g, or t

<220>
<221> modified_base
<222> (7)..(7)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (7)..(8)
<223> n is a, c, g, or t

<220>
<221> modified_base
<222> (8)..(8)
<223> n represents iso-cytosine

<400> 68
gnggttnntc

10

<210> 69
<211> 10
<212> DNA
<213> Artificial

<220>
<223> synthetic oligonucleotide

<220>
<221> modified_base
<222> (2)..(2)
<223> n represents iso-cytosine

<220>
<221> misc_feature

<222> (2)..(2)
<223> n is a, c, g, or t

<220>
<221> modified_base
<222> (6)..(6)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (6)..(6)
<223> n is a, c, g, or t

<400> 69
cnccgnaatc

10

<210> 70
<211> 10
<212> DNA
<213> Artificial

<220>
<223> synthetic oligonucleotide

<220>
<221> modified_base
<222> (2)..(2)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (2)..(3)
<223> n is a, c, g, or t

<220>
<221> modified_base
<222> (3)..(3)
<223> n represents iso-cytosine

<220>
<221> modified_base
<222> (6)..(6)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (6)..(6)
<223> n is a, c, g, or t

<400> 70
gnnacnacac

10

<210> 71
<211> 9
<212> DNA

<213> Artificial
<220>
<223> synthetic oligonucleotide

<220>
<221> modified_base
<222> (3)..(3)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (3)..(3)
<223> n is a, c, g, or t

<220>
<221> modified_base
<222> (5)..(5)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (5)..(5)
<223> n is a, c, g, or t

<220>
<221> modified_base
<222> (8)..(8)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (8)..(8)
<223> n is a, c, g, or t

<400> 71
gcncngtnc

9

<210> 72
<211> 9
<212> DNA
<213> Artificial

<220>
<223> synthetic oligonucleotide

<220>
<221> modified_base
<222> (2)..(2)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (2)..(2)
<223> n is a, c, g, or t

<220>
<221> modified_base
<222> (4)..(4)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (4)..(4)
<223> n is a, c, g, or t

<220>
<221> modified_base
<222> (8)..(8)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (8)..(8)
<223> n is a, c, g, or t

<400> 72
gncngganc

9

<210> 73
<211> 10
<212> DNA
<213> Artificial

<220>
<223> synthetic oligonucleotide

<220>
<221> modified_base
<222> (4)..(4)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (4)..(4)
<223> n is a, c, g, or t

<220>
<221> modified_base
<222> (9)..(9)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (9)..(9)
<223> n is a, c, g, or t

<400> 73
cganagcanc

10

<210> 74
<211> 10
<212> DNA
<213> Artificial

<220>
<223> synthetic oligonucleotide

<220>
<221> modified_base
<222> (5)..(5)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (5)..(5)
<223> n is a, c, g, or t

<220>
<221> modified_base
<222> (9)..(9)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (9)..(9)
<223> n is a, c, g, or t

<400> 74
cccantccnc

10

<210> 75
<211> 10
<212> DNA
<213> Artificial

<220>
<223> synthetic oligonucleotide

<220>
<221> modified_base
<222> (3)..(3)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (3)..(3)
<223> n is a, c, g, or t

<220>
<221> modified_base
<222> (6)..(6)
<223> n represents iso-cytosine

<220>

<221> misc_feature
<222> (6)..(7)
<223> n is a, c, g, or t

<220>
<221> modified_base
<222> (7)..(7)
<223> n represents iso-cytosine

<400> 75
gtncnncag

10

<210> 76
<211> 10
<212> DNA
<213> Artificial

<220>
<223> synthetic oligonucleotide

<220>
<221> modified_base
<222> (2)..(2)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (2)..(2)
<223> n is a, c, g, or t

<220>
<221> modified_base
<222> (7)..(7)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (7)..(7)
<223> n is a, c, g, or t

<400> 76
cncctancgg

10

<210> 77
<211> 9
<212> DNA
<213> Artificial

<220>
<223> synthetic oligonucleotide

<220>
<221> modified_base
<222> (2)..(2)

<223> n represents iso-cytosine

<220>

<221> misc_feature

<222> (2)..(2)

<223> n is a, c, g, or t

<220>

<221> modified_base

<222> (7)..(7)

<223> n represents iso-cytosine

<220>

<221> misc_feature

<222> (7)..(7)

<223> n is a, c, g, or t

<400> 77

gngttgncg

9

<210> 78

<211> 10

<212> DNA

<213> Artificial

<220>

<223> synthetic oligonucleotide

<220>

<221> modified_base

<222> (2)..(2)

<223> n represents iso-cytosine

<220>

<221> misc_feature

<222> (2)..(2)

<223> n is a, c, g, or t

<220>

<221> modified_base

<222> (6)..(6)

<223> n represents iso-cytosine

<220>

<221> misc_feature

<222> (6)..(6)

<223> n is a, c, g, or t

<220>

<221> modified_base

<222> (8)..(8)

<223> n represents iso-cytosine

<220>

<221> misc_feature

<222> (8)..(8)

<223> n is a, c, g, or t

<400> 78
cnaagnancg

10

<210> 79
<211> 10
<212> DNA
<213> Artificial

<220>
<223> synthetic oligonucleotide

<220>
<221> modified_base
<222> (5)..(5)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (5)..(5)
<223> n is a, c, g, or t

<220>
<221> modified_base
<222> (7)..(7)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (7)..(8)
<223> n is a, c, g, or t

<220>
<221> modified_base
<222> (8)..(8)
<223> n represents iso-cytosine

<400> 79
ggagncnntc

10

<210> 80
<211> 10
<212> DNA
<213> Artificial

<220>
<223> synthetic oligonucleotide

<220>
<221> modified_base
<222> (2)..(2)
<223> n represents iso-cytosine

<220>
 <221> misc_feature
 <222> (2)..(2)
 <223> n is a, c, g, or t

 <220>
 <221> modified_base
 <222> (4)..(4)
 <223> n represents iso-cytosine

 <220>
 <221> misc_feature
 <222> (4)..(4)
 <223> n is a, c, g, or t

 <220>
 <221> modified_base
 <222> (6)..(6)
 <223> n represents iso-cytosine

 <220>
 <221> misc_feature
 <222> (6)..(6)
 <223> n is a, c, g, or t

 <400> 80
 cngnangtac

10

<210> 81
 <211> 10
 <212> DNA
 <213> Artificial

 <220>
 <223> synthetic oligonucleotide

 <220>
 <221> modified_base
 <222> (2)..(2)
 <223> n represents iso-cytosine

 <220>
 <221> misc_feature
 <222> (2)..(2)
 <223> n is a, c, g, or t

 <220>
 <221> modified_base
 <222> (7)..(7)
 <223> n represents iso-cytosine

 <220>
 <221> misc_feature
 <222> (7)..(7)
 <223> n is a, c, g, or t

<220>
<221> modified_base
<222> (9)..(9)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (9)..(9)
<223> n is a, c, g, or t

<400> 81
gnacgantng

10

<210> 82
<211> 10
<212> DNA
<213> Artificial

<220>
<223> synthetic oligonucleotide

<220>
<221> modified_base
<222> (2)..(2)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (2)..(2)
<223> n is a, c, g, or t

<220>
<221> modified_base
<222> (6)..(6)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (6)..(6)
<223> n is a, c, g, or t

<400> 82
gngctncatg

10

<210> 83
<211> 10
<212> DNA
<213> Artificial

<220>
<223> synthetic oligonucleotide

<220>
<221> modified_base

<222> (4)..(4)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (4)..(4)
<223> n is a, c, g, or t

<220>
<221> modified_base
<222> (9)..(9)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (9)..(9)
<223> n is a, c, g, or t

<400> 83
gtgnagagng

10

<210> 84
<211> 9
<212> DNA
<213> Artificial

<220>
<223> synthetic oligonucleotide

<220>
<221> modified_base
<222> (5)..(5)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (5)..(5)
<223> n is a, c, g, or t

<220>
<221> modified_base
<222> (7)..(7)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (7)..(7)
<223> n is a, c, g, or t

<400> 84
gccgncntc

9

<210> 85
<211> 10
<212> DNA

<213> Artificial

<220>
<223> synthetic oligonucleotide

<220>
<221> modified_base
<222> (4)..(4)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (4)..(4)
<223> n is a, c, g, or t

<220>
<221> modified_base
<222> (7)..(7)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (7)..(7)
<223> n is a, c, g, or t

<400> 85
caancgntcg

10

<210> 86
<211> 10
<212> DNA
<213> Artificial

<220>
<223> synthetic oligonucleotide

<220>
<221> modified_base
<222> (5)..(5)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (5)..(5)
<223> n is a, c, g, or t

<220>
<221> modified_base
<222> (8)..(8)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (8)..(8)
<223> n is a, c, g, or t

<400> 86
cacanacngc

10

<210> 87
<211> 9
<212> DNA
<213> Artificial

<220>
<223> synthetic oligonucleotide

<220>
<221> modified_base
<222> (2)..(2)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (2)..(2)
<223> n is a, c, g, or t

<220>
<221> modified_base
<222> (6)..(6)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (6)..(7)
<223> n is a, c, g, or t

<220>
<221> modified_base
<222> (7)..(7)
<223> n represents iso-cytosine

<400> 87
gntggnnccg

9

<210> 88
<211> 9
<212> DNA
<213> Artificial

<220>
<223> synthetic oligonucleotide

<220>
<221> modified_base
<222> (4)..(4)
<223> n represents iso-cytosine

<220>

<221> misc_feature
<222> (4)..(4)
<223> n is a, c, g, or t

<220>
<221> modified_base
<222> (7)..(7)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (7)..(7)
<223> n is a, c, g, or t

<400> 88
gccnccngt

9

<210> 89
<211> 10
<212> DNA
<213> Artificial

<220>
<223> synthetic oligonucleotide

<220>
<221> modified_base
<222> (2)..(2)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (2)..(2)
<223> n is a, c, g, or t

<220>
<221> modified_base
<222> (4)..(4)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (4)..(4)
<223> n is a, c, g, or t

<220>
<221> modified_base
<222> (9)..(9)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (9)..(9)
<223> n is a, c, g, or t

<400> 89

cnanggtcnc

10

<210> 90
<211> 9
<212> DNA
<213> Artificial

<220>
<223> synthetic oligonucleotide

<220>
<221> modified_base
<222> (3)..(3)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (3)..(4)
<223> n is a, c, g, or t

<220>
<221> modified_base
<222> (4)..(4)
<223> n represents iso-cytosine

<220>
<221> modified_base
<222> (6)..(6)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (6)..(6)
<223> n is a, c, g, or t

<400> 90
ccnngngtg

9

<210> 91
<211> 10
<212> DNA
<213> Artificial

<220>
<223> synthetic oligonucleotide

<220>
<221> modified_base
<222> (3)..(3)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (3)..(3)

<223> n is a, c, g, or t

<220>

<221> modified_base

<222> (6)..(6)

<223> n represents iso-cytosine

<220>

<221> misc_feature

<222> (6)..(6)

<223> n is a, c, g, or t

<400> 91

ggnacnccag

10

<210> 92

<211> 10

<212> DNA

<213> Artificial

<220>

<223> synthetic oligonucleotide

<220>

<221> modified_base

<222> (5)..(5)

<223> n represents iso-cytosine

<220>

<221> misc_feature

<222> (5)..(5)

<223> n is a, c, g, or t

<220>

<221> modified_base

<222> (7)..(7)

<223> n represents iso-cytosine

<220>

<221> misc_feature

<222> (7)..(7)

<223> n is a, c, g, or t

<400> 92

gcctncngac

10

<210> 93

<211> 10

<212> DNA

<213> Artificial

<220>

<223> synthetic oligonucleotide

<220>
<221> modified_base
<222> (2)..(2)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (2)..(2)
<223> n is a, c, g, or t

<220>
<221> modified_base
<222> (5)..(5)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (5)..(5)
<223> n is a, c, g, or t

<220>
<221> modified_base
<222> (9)..(9)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (9)..(9)
<223> n is a, c, g, or t

<400> 93
cnttnccgnc

10

<210> 94
<211> 10
<212> DNA
<213> Artificial

<220>
<223> synthetic oligonucleotide

<220>
<221> modified_base
<222> (2)..(2)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (2)..(2)
<223> n is a, c, g, or t

<220>
<221> modified_base
<222> (6)..(6)
<223> n represents iso-cytosine

<220>
 <221> misc_feature
 <222> (6)..(6)
 <223> n is a, c, g, or t

 <220>
 <221> modified_base
 <222> (8)..(8)
 <223> n represents iso-cytosine

 <220>
 <221> misc_feature
 <222> (8)..(9)
 <223> n is a, c, g, or t

 <220>
 <221> modified_base
 <222> (9)..(9)
 <223> n represents iso-cytosine

 <400> 94
 cnctangnng

10

<210> 95
 <211> 9
 <212> DNA
 <213> Artificial

 <220>
 <223> synthetic oligonucleotide

 <220>
 <221> modified_base
 <222> (2)..(2)
 <223> n represents iso-cytosine

 <220>
 <221> misc_feature
 <222> (2)..(2)
 <223> n is a, c, g, or t

 <220>
 <221> modified_base
 <222> (5)..(5)
 <223> n represents iso-cytosine

 <220>
 <221> misc_feature
 <222> (5)..(5)
 <223> n is a, c, g, or t

 <220>
 <221> modified_base
 <222> (8)..(8)
 <223> n represents iso-cytosine

<220>
 <221> misc_feature
 <222> (8)..(8)
 <223> n is a, c, g, or t

<400> 95
 cngcnagng

9

<210> 96
 <211> 10
 <212> DNA
 <213> Artificial

<220>
 <223> synthetic oligonucleotide

<220>
 <221> modified_base
 <222> (2)..(2)
 <223> n represents iso-cytosine

<220>
 <221> misc_feature
 <222> (2)..(2)
 <223> n is a, c, g, or t

<220>
 <221> modified_base
 <222> (6)..(6)
 <223> n represents iso-cytosine

<220>
 <221> misc_feature
 <222> (6)..(6)
 <223> n is a, c, g, or t

<400> 96
 cnagcnacgg

10

<210> 97
 <211> 10
 <212> DNA
 <213> Artificial

<220>
 <223> synthetic oligonucleotide

<220>
 <221> modified_base
 <222> (5)..(5)
 <223> n represents iso-cytosine

<220>
 <221> misc_feature

<222> (5)..(5)
<223> n is a, c, g, or t

<220>
<221> modified_base
<222> (8)..(8)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (8)..(8)
<223> n is a, c, g, or t

<400> 97
gacangcncc

10

<210> 98
<211> 9
<212> DNA
<213> Artificial

<220>
<223> synthetic oligonucleotide

<220>
<221> modified_base
<222> (4)..(4)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (4)..(4)
<223> n is a, c, g, or t

<220>
<221> modified_base
<222> (7)..(7)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (7)..(8)
<223> n is a, c, g, or t

<220>
<221> modified_base
<222> (8)..(8)
<223> n represents iso-cytosine

<400> 98
gggncgna

9

<210> 99
<211> 10
<212> DNA

<213> Artificial

<220>

<223> synthetic oligonucleotide

<400> 99

gccagtttaa

10

<210> 100

<211> 10

<212> DNA

<213> Artificial

<220>

<223> synthetic oligonucleotide

<220>

<221> modified_base

<222> (5)..(5)

<223> n represents iso-cytosine

<220>

<221> misc_feature

<222> (5)..(5)

<223> n is a, c, g, or t

<400> 100

gccantttaa

10

<210> 101

<211> 10

<212> DNA

<213> Artificial

<220>

<223> synthetic oligonucleotide

<220>

<221> modified_base

<222> (3)..(3)

<223> n represents iso-cytosine

<220>

<221> misc_feature

<222> (3)..(3)

<223> n is a, c, g, or t

<400> 101

gcnagtttaa

10

<210> 102

<211> 10

<212> DNA

<213> Artificial

<220>

<223> synthetic oligonucleotide

<220>

<221> modified_base

<222> (2)..(2)

<223> n represents iso-guanine

<220>

<221> misc_feature

<222> (2)..(2)

<223> n is a, c, g, or t

<400> 102

gncagtttaa

10

<210> 103

<211> 10

<212> DNA

<213> Artificial

<220>

<223> synthetic oligonucleotide

<220>

<221> modified_base

<222> (2)..(2)

<223> n represents iso-guanine

<220>

<221> misc_feature

<222> (2)..(3)

<223> n is a, c, g, or t

<220>

<221> modified_base

<222> (3)..(3)

<223> n represents iso-guanine

<400> 103

gnnagtttaa

10

<210> 104

<211> 154

<212> DNA

<213> Mus musculus chromosome 10 genomic contig

<300>

<308> NT_039491.1

<309> 2003-02-25

<313> (1729106)..(1729259)

<400> 104
 agaaacaacc atctaataccc aactataaat tcaaggctcc acagacgaaa cagtgaagaa 60
 taattgttca gcataactaac caactgatta catatttacc atactcaggt ttgtgcttca 120
 taaaaccca yagtcggcg ctccctgtta gatg 154

<210> 105
 <211> 61
 <212> DNA
 <213> Mus musculus chromosome 2 genomic contig

<300>
 <308> NT_039209.1
 <309> 2003-02-25
 <313> (27172470)..(27172530)

<400> 105
 cttctcccat tgcccagggc actctcctct gtagartaga ctgatytttg tggagacatc 60
 a 61

<210> 106
 <211> 67
 <212> DNA
 <213> Mus musculus chromosome 9 genomic contig

<300>
 <308> NT_039473.1
 <309> 2003-02-25
 <313> (532094)..(532160)

<400> 106
 agtgccctgct acctgtcagg tgaaaatttc ttagtgatcc yaagctcaat ggggtgcyggc 60
 ttgcagg 67

<210> 107
 <211> 72
 <212> DNA
 <213> Mus musculus chromosome 18 genomic contig

<300>
 <308> NT_039674.1
 <309> 2003-02-25
 <313> (46479067)..(46479138)

<400> 107
 ggttggaatg tttgcacatg cagtgttagt tatttgggyg ataactactt agcttatcta 60
 gcctgggtcca gc 72

<210> 108
 <211> 80

<212> DNA
 <213> Mus musculus chromosome 17 genomic contig

 <300>
 <308> NT_039662.1
 <309> 2003-02-25
 <313> (658679)..(658758)

 <400> 108
 ctgatctgac ctcagactgt tgtgctaaca gatataacac cagtaagttg astcaaatac 60

 tgcaggaagt agagccttgc 80

 <210> 109
 <211> 89
 <212> DNA
 <213> Mus musculus chromosome 2 genomic contig

 <300>
 <308> NT_039212.1
 <309> 2003-02-25
 <313> (3887249)..(3887337)

 <400> 109
 gactgctgga gagctgaggg aggctgtgga gaataaggag agagcrtagt ctcgtgcctt 60

 gccctgceca tactgagcag ccaagacac 89

 <210> 110
 <211> 96
 <212> DNA
 <213> Mus musculus chromosome 13 genomic contig

 <300>
 <308> NT_039586.1
 <309> 2003-02-25
 <313> (6594595)..(6594690)

 <400> 110
 ggactgtcca aakggatctc aaggagaata gtccttgcta ttargagtat aaaggcataa 60

 aagaggtcat aggggacaac catgaccaag aagttg 96

 <210> 111
 <211> 107
 <212> DNA
 <213> Mus musculus chromosome 12 genomic contig

 <300>
 <308> NT_039551.1
 <309> 2003-02-25
 <313> (15414183)..(15414289)

 <400> 111
 ccttctgca ytccacagta taaacacaga atgcacactg crgtcgttgt atttgtgttc 60

gatgtgaatt aaagatgctt tggctaagcc aggagatgat aatactg 107

<210> 112
<211> 129
<212> DNA
<213> Mus musculus chromosome 2 genomic contig

<300>
<308> NT_039209.1
<309> 2003-02-25
<313> (26992396)..(26992524)

<400> 112
cacatacacc atgtcagcca tcagcgcaaa gccttcgagt ttcagctgtg agatgaaggc 60
ttggagaagc acgttgatct gcaaagaagc aaaggagcta gcggaggcyg gtcactgacc 120
gactgctca 129

<210> 113
<211> 18
<212> DNA
<213> Artificial

<220>
<223> synthetic oligonucleotide

<400> 113
catctaacag ggagcgcc 18

<210> 114
<211> 24
<212> DNA
<213> Artificial

<220>
<223> synthetic oligonucleotide

<220>
<221> modified_base
<222> (1)..(1)
<223> n represents deoxythymidylate labeled with 6-carboxyfluorescein (6-FAM)

<220>
<221> misc_feature
<222> (1)..(1)
<223> n is a, c, g, or t

<400> 114
nagaaacaac catctaattcc caca 24

<210> 115
<211> 19
<212> DNA
<213> Artificial

<220>
<223> synthetic oligonucleotide

<220>
<221> modified_base
<222> (1)..(1)
<223> n represents deoxythymidylate labeled with 6-carboxyfluorescein
(6-FAM)

<220>
<221> misc_feature
<222> (1)..(1)
<223> n is a, c, g, or t

<400> 115
ncttctccca ttgccagg 19

<210> 116
<211> 23
<212> DNA
<213> Artificial

<220>
<223> synthetic oligonucleotide

<400> 116
tgatgtctcc acaaagatca gtc 23

<210> 117
<211> 19
<212> DNA
<213> Artificial

<220>
<223> synthetic oligonucleotide

<400> 117
agtgcctgct acctgtcag 19

<210> 118
<211> 17
<212> DNA
<213> Artificial

<220>
<223> synthetic oligonucleotide

<220>

```

<221> modified_base
<222> (1)..(1)
<223> n represents deoxythymidylate labeled with 6-carboxyfluorescein
      (6-FAM)

<220>
<221> misc_feature
<222> (1)..(1)
<223> n is a, c, g, or t

<400> 118
ncctgcaagc cagcacc
17

<210> 119
<211> 22
<212> DNA
<213> Artificial

<220>
<223> synthetic oligonucleotide

<220>
<221> modified_base
<222> (1)..(1)
<223> n represents deoxythymidylate labeled with 6-carboxyfluorescein
      (6-FAM)

<220>
<221> misc_feature
<222> (1)..(1)
<223> n is a, c, g, or t

<400> 119
ngggttggaat gtttgacat gc
22

<210> 120
<211> 21
<212> DNA
<213> Artificial

<220>
<223> synthetic oligonucleotide

<400> 120
gctggaccag gctagataag c
21

<210> 121
<211> 23
<212> DNA
<213> Artificial

<220>
<223> synthetic oligonucleotide

```

<220>
 <221> modified_base
 <222> (1)..(1)
 <223> n represents deoxythymidylate labeled with 6-carboxyfluorescein
 (6-FAM)

<220>
 <221> misc_feature
 <222> (1)..(1)
 <223> n is a, c, g, or t

<400> 121
 nctgatctga cctcagactg ttg 23

<210> 122
 <211> 19
 <212> DNA
 <213> Artificial

<220>
 <223> synthetic oligonucleotide

<400> 122
 gcaaggctct acttcctgc 19

<210> 123
 <211> 20
 <212> DNA
 <213> Artificial

<220>
 <223> synthetic oligonucleotide

<220>
 <221> modified_base
 <222> (1)..(1)
 <223> n represents deoxythymidylate labeled with 6-carboxyfluorescein
 (6-FAM)

<220>
 <221> misc_feature
 <222> (1)..(1)
 <223> n is a, c, g, or t

<400> 123
 ngactgctgg agagctgagg 20

<210> 124
 <211> 21
 <212> DNA
 <213> Artificial

<220>

<223> synthetic oligonucleotide
 <400> 124
 gtgtcttggc tgctcagtat g 21

<210> 125
 <211> 21
 <212> DNA
 <213> Artificial
 <220>
 <223> synthetic oligonucleotide

<220>
 <221> modified_base
 <222> (1)..(1)
 <223> n represents deoxythymidylate labeled with 6-carboxyfluorescein
 (6-FAM)

<220>
 <221> misc_feature
 <222> (1)..(1)
 <223> n is a, c, g, or t

<400> 125
 nggactgtcc aaagggatct c 21

<210> 126
 <211> 22
 <212> DNA
 <213> Artificial
 <220>
 <223> synthetic oligonucleotide

<400> 126
 caacttcttg gtcattggttg tc 22

<210> 127
 <211> 19
 <212> DNA
 <213> Artificial
 <220>
 <223> synthetic oligonucleotide

<220>
 <221> modified_base
 <222> (1)..(1)
 <223> n represents indodicarbocyanine
 3-l-0-(2-cyanoethyl)-(N,N-diisopropyl)-phosphoramidite (Cy3)

<220>

<221> misc_feature
<222> (1)..(1)
<223> n is a, c, g, or t

<400> 127
nccttctctgc aytccacag

19

<210> 128
<211> 26
<212> DNA
<213> Artificial

<220>
<223> synthetic oligonucleotide

<220>
<221> modified_base
<222> (1)..(1)
<223> n represents deoxythymidylate labeled with 6-carboxyfluorescein
(6-FAM)

<220>
<221> misc_feature
<222> (1)..(1)
<223> n is a, c, g, or t

<400> 128
ncagtattat catctcctgg cttagc

26

<210> 129
<211> 20
<212> DNA
<213> Artificial

<220>
<223> synthetic oligonucleotide

<220>
<221> modified_base
<222> (1)..(1)
<223> n represents deoxythymidylate labeled with 6-carboxyfluorescein
(6-FAM)

<220>
<221> misc_feature
<222> (1)..(1)
<223> n is a, c, g, or t

<400> 129
ncacatacac catgtcagcc

20

<210> 130
<211> 17

<212> DNA
<213> Artificial

<220>
<223> synthetic oligonucleotide

<400> 130
tgagcagtcg gtcagtg

17

<210> 131
<211> 28
<212> DNA
<213> Artificial

<220>
<223> synthetic oligonucleotide

<220>
<221> modified_base
<222> (4)..(4)
<223> n represents iso-guanine

<220>
<221> misc_feature
<222> (4)..(4)
<223> n is a, c, g, or t

<220>
<221> modified_base
<222> (8)..(8)
<223> n represents iso-guanine

<220>
<221> misc_feature
<222> (8)..(8)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (11)..(11)
<223> n represents a n-propylene spacer (c3)

<400> 131
gtgnacangc ngcttcatac aaacccac

28

<210> 132
<211> 28
<212> DNA
<213> Artificial

<220>
<223> synthetic oligonucleotide

<220>

<221> modified_base
<222> (4)..(4)
<223> n represents iso-guanine

<220>
<221> misc_feature
<222> (4)..(4)
<223> n is a, c, g, or t

<220>
<221> modified_base
<222> (9)..(9)
<223> n represents iso-guanine

<220>
<221> misc_feature
<222> (9)..(9)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (11)..(11)
<223> n represents a n-propylene spacer (c3)

<400> 132
cgantctgnc ngcttcatac aaacccat

28

<210> 133
<211> 28
<212> DNA
<213> Artificial

<220>
<223> synthetic oligonucleotide

<220>
<221> modified_base
<222> (4)..(4)
<223> n represents iso-guanine

<220>
<221> misc_feature
<222> (4)..(4)
<223> n is a, c, g, or t

<220>
<221> modified_base
<222> (8)..(8)
<223> n represents iso-guanine

<220>
<221> misc_feature
<222> (8)..(8)
<223> n is a, c, g, or t

<220>

<221> misc_feature
<222> (11)..(11)
<223> n represents a n-propylene spacer (c3)

<400> 133
ctancaancc ncactctcct ctgtagaa

28

<210> 134
<211> 28
<212> DNA
<213> Artificial

<220>
<223> synthetic oligonucleotide

<220>
<221> modified_base
<222> (5)..(5)
<223> n represents iso-guanine

<220>
<221> misc_feature
<222> (5)..(5)
<223> n is a, c, g, or t

<220>
<221> modified_base
<222> (7)..(7)
<223> n represents iso-guanine

<220>
<221> misc_feature
<222> (7)..(7)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (11)..(11)
<223> n represents a n-propylene spacer (c3)

<400> 134
gagancnaag ncactctcct ctgtagag

28

<210> 135
<211> 31
<212> DNA
<213> Artificial

<220>
<223> synthetic oligonucleotide

<220>
<221> modified_base
<222> (5)..(5)

<223> n represents iso-guanine

<220>

<221> misc_feature

<222> (5)..(5)

<223> n is a, c, g, or t

<220>

<221> modified_base

<222> (9)..(9)

<223> n represents iso-guanine

<220>

<221> misc_feature

<222> (9)..(9)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (11)..(11)

<223> n represents a n-propylene spacer (c3)

<400> 135

gttcntgang ngaaaatttc ttagtgatcc t

31

<210> 136

<211> 30

<212> DNA

<213> Artificial

<220>

<223> synthetic oligonucleotide

<220>

<221> modified_base

<222> (3)..(3)

<223> n represents iso-guanine

<220>

<221> misc_feature

<222> (3)..(3)

<223> n is a, c, g, or t

<220>

<221> modified_base

<222> (6)..(6)

<223> n represents iso-guanine

<220>

<221> misc_feature

<222> (6)..(6)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (11)..(11)

<223> n represents a n-propylene spacer (c3)

<400> 136

gcntanctac naaaatttct tagtgatccc

30

<210> 137

<211> 29

<212> DNA

<213> Artificial

<220>

<223> synthetic oligonucleotide

<220>

<221> modified_base

<222> (5)..(5)

<223> n represents iso-guanine

<220>

<221> misc_feature

<222> (5)..(5)

<223> n is a, c, g, or t

<220>

<221> modified_base

<222> (7)..(7)

<223> n represents iso-guanine

<220>

<221> misc_feature

<222> (7)..(7)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (11)..(11)

<223> n represents a n-propylene spacer (c3)

<400> 137

gttancntcc nagtgtagt tatttggt

29

<210> 138

<211> 28

<212> DNA

<213> Artificial

<220>

<223> synthetic oligonucleotide

<220>

<221> modified_base

<222> (4)..(4)

<223> n represents iso-guanine

```

<220>
<221> misc_feature
<222> (4)..(4)
<223> n is a, c, g, or t

<220>
<221> modified_base
<222> (9)..(9)
<223> n represents iso-guanine

<220>
<221> misc_feature
<222> (9)..(9)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (11)..(11)
<223> n represents a n-propylene spacer (c3)

<400> 138
cacnatacng ngtgtagtt atttgggc

```

28

```

<210> 139
<211> 29
<212> DNA
<213> Artificial

<220>
<223> synthetic oligonucleotide

<220>
<221> modified_base
<222> (2)..(2)
<223> n represents iso-guanine

<220>
<221> misc_feature
<222> (2)..(2)
<223> n is a, c, g, or t

<220>
<221> modified_base
<222> (7)..(7)
<223> n represents iso-guanine

<220>
<221> misc_feature
<222> (7)..(7)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (11)..(11)
<223> n represents a n-propylene spacer (c3)

```

<400> 139
cntaccnatg ntaacaccag taagttgac

29

<210> 140
<211> 29
<212> DNA
<213> Artificial

<220>
<223> synthetic oligonucleotide

<220>
<221> modified_base
<222> (2)..(2)
<223> n represents iso-guanine

<220>
<221> misc_feature
<222> (2)..(2)
<223> n is a, c, g, or t

<220>
<221> modified_base
<222> (6)..(6)
<223> n represents iso-guanine

<220>
<221> misc_feature
<222> (6)..(6)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (11)..(11)
<223> n represents a n-propylene spacer (c3)

<400> 140
gncganaatc ntaacaccag taagttgag

29

<210> 141
<211> 28
<212> DNA
<213> Artificial

<220>
<223> synthetic oligonucleotide

<220>
<221> modified_base
<222> (2)..(2)
<223> n represents iso-guanine

<220>
<221> misc_feature

<222> (2)..(2)
 <223> n is a, c, g, or t

 <220>
 <221> modified_base
 <222> (7)..(7)
 <223> n represents iso-guanine

 <220>
 <221> misc_feature
 <222> (7)..(7)
 <223> n is a, c, g, or t

 <220>
 <221> misc_feature
 <222> (11)..(11)
 <223> n represents a n-propylene spacer (c3)

 <400> 141
 gncgtanttg nagaataagg agagagca

28

<210> 142
 <211> 27
 <212> DNA
 <213> Artificial

 <220>
 <223> synthetic oligonucleotide

 <220>
 <221> modified_base
 <222> (3)..(3)
 <223> n represents iso-guanine

 <220>
 <221> misc_feature
 <222> (3)..(3)
 <223> n is a, c, g, or t

 <220>
 <221> modified_base
 <222> (7)..(7)
 <223> n represents iso-guanine

 <220>
 <221> misc_feature
 <222> (7)..(7)
 <223> n is a, c, g, or t

 <220>
 <221> misc_feature
 <222> (11)..(11)
 <223> n represents a n-propylene spacer (c3)

 <400> 142
 gtntatnccg ngaataagga gagagcg

27

<210> 143
<211> 31
<212> DNA
<213> Artificial

<220>
<223> synthetic oligonucleotide

<220>
<221> modified_base
<222> (5)..(5)
<223> n represents iso-guanine

<220>
<221> misc_feature
<222> (5)..(5)
<223> n is a, c, g, or t

<220>
<221> modified_base
<222> (8)..(8)
<223> n represents iso-guanine

<220>
<221> misc_feature
<222> (8)..(8)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (11)..(11)
<223> n represents a n-propylene spacer (c3)

<400> 143
gacnacntc nagaatagtc cttgctatta a

31

<210> 144
<211> 31
<212> DNA
<213> Artificial

<220>
<223> synthetic oligonucleotide

<220>
<221> modified_base
<222> (5)..(5)
<223> n represents iso-guanine

<220>
<221> misc_feature
<222> (5)..(5)
<223> n is a, c, g, or t


```

<220>
<221> modified_base
<222> (9)..(9)
<223> n represents iso-guanine

<220>
<221> misc_feature
<222> (9)..(9)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (11)..(11)
<223> n represents a n-propylene spacer (c3)

<400> 144
ggaanaacng nagaatagtc cttgctatta g

```

31

```

<210> 145
<211> 26
<212> DNA
<213> Artificial

<220>
<223> synthetic oligonucleotide

```

```

<220>
<221> modified_base
<222> (4)..(4)
<223> n represents iso-guanine

```

```

<220>
<221> misc_feature
<222> (4)..(4)
<223> n is a, c, g, or t

```

```

<220>
<221> modified_base
<222> (6)..(6)
<223> n represents iso-guanine

```

```

<220>
<221> misc_feature
<222> (6)..(6)
<223> n is a, c, g, or t

```

```

<220>
<221> misc_feature
<222> (11)..(11)
<223> n represents a n-propylene spacer (c3)

```

```

<400> 145
gatntncagc nagaatgcac actgca

```

26

<210> 146
<211> 25
<212> DNA
<213> Artificial

<220>
<223> synthetic oligonucleotide

<220>
<221> modified_base
<222> (3)..(3)
<223> n represents iso-guanine

<220>
<221> misc_feature
<222> (3)..(3)
<223> n is a, c, g, or t

<220>
<221> modified_base
<222> (6)..(6)
<223> n represents iso-guanine

<220>
<221> misc_feature
<222> (6)..(6)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (11)..(11)
<223> n represents a n-propylene spacer (c3)

<400> 146
gtnatntgcg ngaatgcaca ctgcg

25

<210> 147
<211> 24
<212> DNA
<213> Artificial

<220>
<223> synthetic oligonucleotide

<220>
<221> modified_base
<222> (4)..(4)
<223> n represents iso-guanine

<220>
<221> misc_feature
<222> (4)..(4)
<223> n is a, c, g, or t

<220>

<221> modified_base
<222> (8)..(8)
<223> n represents iso-guanine

<220>
<221> misc_feature
<222> (8)..(9)
<223> n is a, c, g, or t

<220>
<221> modified_base
<222> (9)..(9)
<223> n represents iso-guanine

<220>
<221> misc_feature
<222> (11)..(11)
<223> n represents a n-propylene spacer (c3)

<400> 147
gatngtcnng ngctagcgga ggcc

24

<210> 148
<211> 24
<212> DNA
<213> Artificial

<220>
<223> synthetic oligonucleotide

<220>
<221> modified_base
<222> (3)..(3)
<223> n represents iso-guanine

<220>
<221> misc_feature
<222> (3)..(3)
<223> n is a, c, g, or t

<220>
<221> modified_base
<222> (6)..(6)
<223> n represents iso-guanine

<220>
<221> misc_feature
<222> (6)..(6)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (11)..(11)
<223> n represents a n-propylene spacer (c3)

<400> 148

ggncctnatgg ngctagcgga ggct

24

<210> 149
<211> 61
<212> DNA
<213> Artificial

<220>
<223> synthetic oligonucleotide

<400> 149
cttctcccat tgcccagggc actctcctct gtagartaga ctgatytgttggaggacatc 60

a 61

<210> 150
<211> 35
<212> DNA
<213> Artificial

<220>
<223> synthetic oligonucleotide

<220>
<221> modified_base
<222> (2)..(2)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (2)..(2)
<223> n is a, c, g, or t

<220>
<221> modified_base
<222> (5)..(5)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (5)..(5)
<223> n is a, c, g, or t

<220>
<221> modified_base
<222> (8)..(8)
<223> n represents iso-cytosine

<220>
<221> misc_feature
<222> (8)..(8)
<223> n is a, c, g, or t

<220>
<221> modified_base

<222> (12)..(12)
 <223> n represents iso-cytosine

 <220>
 <221> misc_feature
 <222> (12)..(12)
 <223> n is a, c, g, or t

 <400> 150
 cngcnagnga tntgatgtct ccacaaagat cagtc

35

<210> 151
 <211> 28
 <212> DNA
 <213> Artificial

<220>
 <223> synthetic oligonucleotide

<220>
 <221> modified_base
 <222> (4)..(4)
 <223> n represents iso-guanine

<220>
 <221> misc_feature
 <222> (4)..(4)
 <223> n is a, c, g, or t

<220>
 <221> modified_base
 <222> (8)..(8)
 <223> n represents iso-guanine

<220>
 <221> misc_feature
 <222> (8)..(8)
 <223> n is a, c, g, or t

<220>
 <221> misc_feature
 <222> (11)..(11)
 <223> n represents a n-propylene spacer (c3)

<400> 151
 ctancaancc ncactctcct ctgtagaa

28

<210> 152
 <211> 28
 <212> DNA
 <213> Artificial

<220>
 <223> synthetic oligonucleotide

<220>
<221> modified_base
<222> (5)..(5)
<223> n represents iso-guanine

<220>
<221> misc_feature
<222> (5)..(5)
<223> n is a, c, g, or t

<220>
<221> modified_base
<222> (7)..(7)
<223> n represents iso-guanine

<220>
<221> misc_feature
<222> (7)..(7)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (11)..(11)
<223> n represents a n-propylene spacer (c3)

<400> 152
gagancnaag ncactctcct ctgtagag

28

<210> 153
<211> 13
<212> DNA
<213> Artificial

<220>
<223> synthetic oligonucleotide

<220>
<221> misc_feature
<222> (1)..(1)
<223> n represents a 5'-phosphate

<220>
<221> modified_base
<222> (2)..(2)
<223> n represents iso-guanine

<220>
<221> misc_feature
<222> (2)..(2)
<223> n is a, c, g, or t

<220>
<221> modified_base
<222> (6)..(6)
<223> n represents iso-guanine

<220>
 <221> misc_feature
 <222> (6)..(6)
 <223> n is a, c, g, or t

<220>
 <221> modified_base
 <222> (9)..(9)
 <223> n represents iso-guanine

<220>
 <221> misc_feature
 <222> (9)..(9)
 <223> n is a, c, g, or t

<220>
 <221> modified_base
 <222> (12)..(12)
 <223> n represents iso-guanine

<220>
 <221> misc_feature
 <222> (12)..(12)
 <223> n is a, c, g, or t

<400> 153
 nnatcnctng cng

13

<210> 154
 <211> 18
 <212> DNA
 <213> Artificial

<220>
 <223> synthetic oligonucleotide

<400> 154
 agaacccttt cctcttcc

18

<210> 155
 <211> 47
 <212> DNA
 <213> Artificial

<220>
 <223> synthetic oligonucleotide

<400> 155
 aagaaccctt tcctcttccg atgcaggata cttacaata aatattt

47

<210> 156
 <211> 39
 <212> DNA
 <213> Artificial

<220>

<223> synthetic oligonucleotide

<400> 156

gcagacagga yaaatattta ttgttaagta tcctgcatc

39